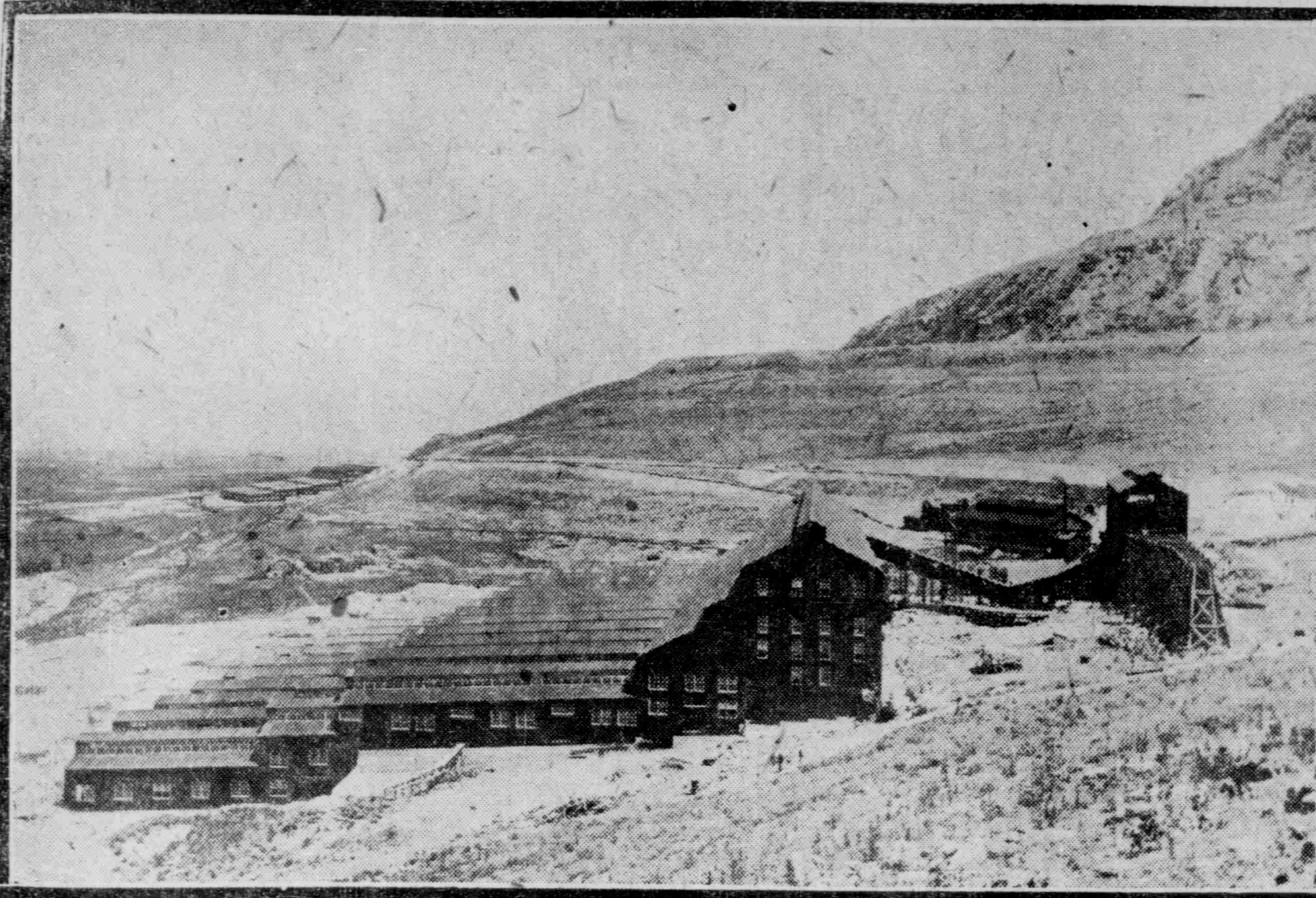
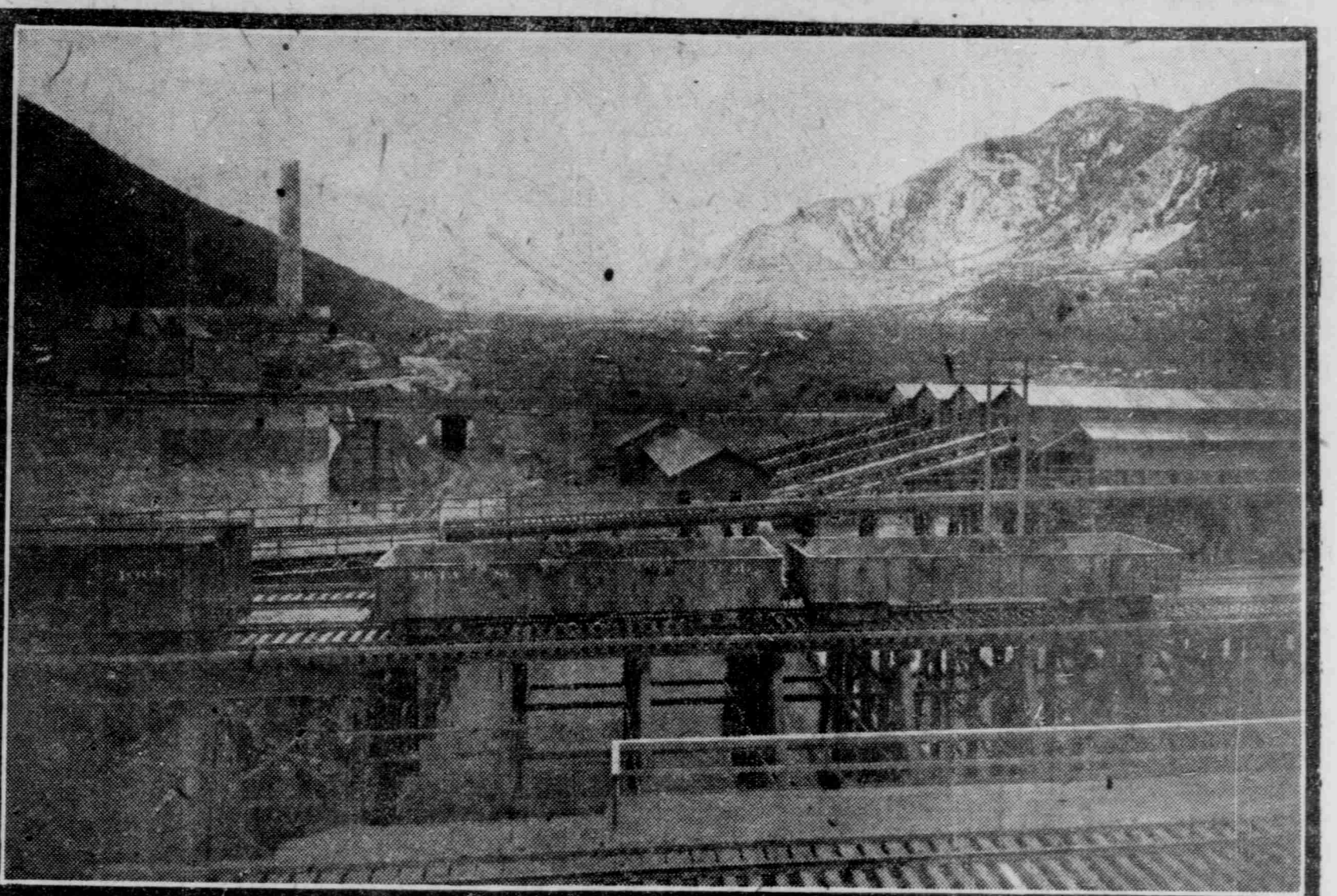


GARFIELD, COPPER SMELTER AND MILL TOWN



Boston Consolidated Concentrator.



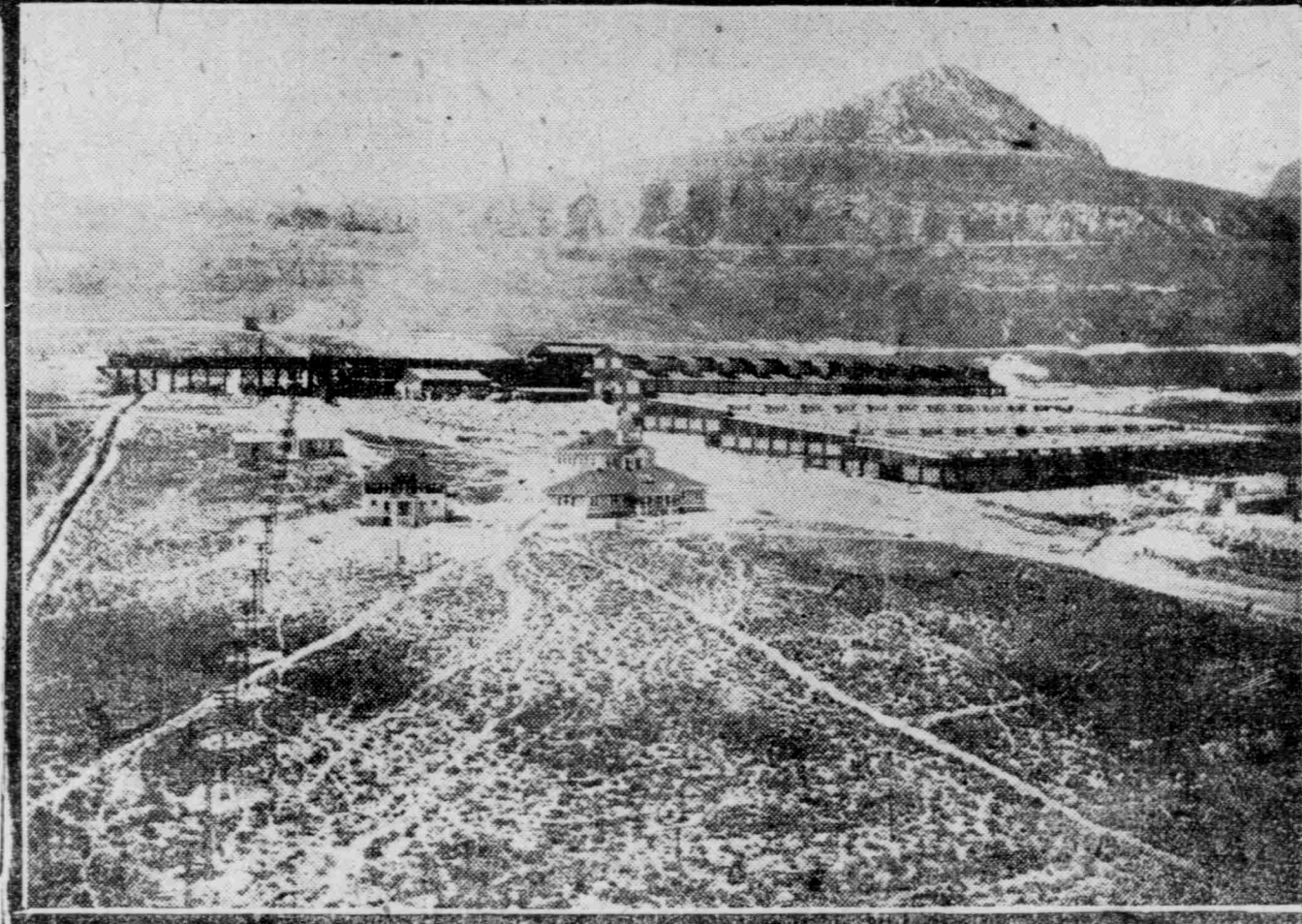
Garfield Smelter of the American Smelting & Refining Company.

Fourteen miles west of Salt Lake, on the line of the San Pedro, Los Angeles & Salt Lake and the Western Pacific railroads is the two-year-old copper smelter and mill town of Garfield, named after the famous old bathing resort on the shores of the Salt Lake, a few miles beyond. The place now has a population of about 3,000 people, and supports three hotels, a general store and numerous private boarding houses. There are about 100 dwelling houses and cottages of neat design in the place, which is designed as a home town for the employees of the mammoth smelting and milling works of the three companies which own all the stock in the townsite company. It is a model little city in every respect and, as the smelter works are enlarged and the capacities of the great milling plants are increased, as they are sure to be as the years roll by, the town will grow to much larger proportions. The sale of liquor is restricted, and there are no bawdy houses or tough resorts of any kind within its limits. The town was built for a double purpose, one to encourage a high class of labor to seek employment at the various works, and the other to protect the community against the inroads of professional crooks and gamblers, strike-breakers, thugs and bums. It is intended to be a community of respectable, honest people, and the aim is to make and keep it such.

The Garfield Townsite company and the Garfield Waterworks company are owned and operated by the American Smelting company, the Utah Copper company and the Boston Consolidated company, jointly, and the lands of

these corporations surround it for miles on all sides. Waterworks, electric lights and all modern conveniences are at the disposition of the residents, and the town is rapidly becoming a popular little place in which to reside.

One of the accompanying half-tone pictures shows the mammoth 2,000-ton copper smelting works of the Garfield Smelting company, one of the subsidiary companies of the American Smelting & Refining company, that has cost something like \$3,000,000 to date. It is now handling about 1,200 tons of crude ore and concentrates per day, and a force of 1,000 men is employed. The capacity of the works is being built up and, within a few months, it will be able to handle 2,000 tons a day. Another picture shows the 6,000-ton milling plant of the Utah Copper company, one of the biggest copper ore dressing plants in the world, which is now running at about two-thirds capacity. With other sections being brought into commission as rapidly as circumstances will permit, this milling plant, with its magnificent electric power plant, its pumping station, machine shops and other buildings, covers a ground space of approximately ten acres, and everything about the works suggests all that the company has claimed, namely, that the works were being built to stand the test of time. General Manager D. C. Jackling states that when the period of construction is over the Utah Copper company will be able to operate its mines, mills and power plants, all of them, with a force of approximately 1,000 men. The company now has on its payrolls not far



Main Plant of Utah Copper Company.

from 1,500 men. To mine and mill 7,000 tons of ore a day with such a force explains why the company expects to produce copper at a cost that will allow big profits on even a 13c market. The third illustration shows the milling plant of the Boston Consolidated company, with its capacity of 3,000 tons of ore per day. This mill has just been

THE BINGHAM-NEW HAVEN.

Among the big dividend payers of the past year has been the Bingham-New Haven Copper & Gold property, a company which for the past two years, in fact, has proven worthy of all confidence placed in it by the men who have backed the development work of the claims with their capital and brains.

The property jumped into the dividend-paying class early in 1906, and has steadily increased in value, until today there are few properties showing a more substantial gain. There is every prospect that the property will stay in the dividend-paying class for a long time to come, as the work that is now being pushed on the workings of the mine show indications of big ore deposits of high values. The manner in which the development work was planned and carried out indicates that the management of the company knew about what there was in the property.

This has been the most prosperous year in the history of the company, not only because the dividends have come regularly and with constantly increasing volume, but principally because the management has the property well on its way towards bigger things.

The company has had several large projects on its hands during the past two years and have cleaned them all up in a most satisfactory manner. The heaviest piece of work accomplished was the completion of the tramway, a work that meant a reduction in the cost of transportation of more than 40 per cent, and which increased the shipping facilities about 50 per cent. The tramway is 4,500 feet long and brings the ore almost to the tracks of the railroad. The result has been that the increased ore shipments have been quickly and economically handled.

During the year the company has looked after the comfort of the men with great care, and several new cottages have been erected near the mine in addition to those erected last year. The property of the company consists of twenty-five claims at the head of Carr's fork, in Bingham, and is situated between the Bingham Central, the Utah Consolidated and the Boston Consolidated properties. The company is controlled by New Haven capitalists and managed by C. H. Doolittle of Salt Lake, with offices at 306 Herald building. Mr. Doolittle is one of the best known and most energetic mining operators in the west and knows the mining game to the last detail.

PARK CITY MAINTAINS ADMIRABLE RECORD

After having shipped 91,255 tons of ore during the past twelve months, the year 1907 goes into history at Park City as one of the leanest periods since the opening of mines here. For many reasons things have been rather on the go-back, but of late the old spirit has taken possession again, and it is promised that the future will be brighter than even the brightest years in the past. Several things have militated against the town during the past year, principal amongst which was the unrest which seemed to prevail amongst the laboring men, and the general feeling of lack of confidence manifested not only by the mining operators, but also by the merchants and business men generally of the camp. The fact, too, that the Ontario tunnel remained closed after the hardest kind of work for its recovery on the part of the management was a discouraging feature which would not down, as all who are at all familiar with the conditions of Park City knew the absolute necessity for the opening of the waterway and how vitally it affected the mining industry of the camp.

Silver King Coalition Mines Co.

On the other hand, there have been several things which have done not a little for the future of the camp, one of which was the consolidation of the Silver King and the various properties north and west of the King into the Silver King Coalition Mines company, the absorbing of the Ontario and Daly by the Bamberger interests, and lastly, the determination of Jesse Knight to take a chance in this locality, and the subsequent formation of the Treasure Hill company, which included the Kentucky and Creole claims. Another feature which, while not of such importance, was the determination of the Grassell Chemical company to operate in Park City, and thereby give an opportunity to the Daly Judge, and other zinc-producing properties of the camp to market a portion of their product which heretofore has been put over the dump. Taken on the whole, the events redounding in good for the camp greatly overshadow those which militated against the progress of Park City, and it takes no great optimism to see a bright future for the camp.

Like all mining camps, Park City has its reliable profession and anything which in any way affects any of these properties affects the entire community. In Park City the properties which may be considered the producers of the place are the Silver King Coalition, Daly-West, which includes the Ontario and Daly Judge and the American Flag.

What Happened to the Silver King.
Some time in 1906 a suit was begun by

James McGregor and others against the Silver King for alleged extraction of ores which belonged to the plaintiffs in the action. Things moved along for some time in the preparation for a suit, and then was given out that a proposition had been made to the plaintiffs by the owners of the King for a sale of their property and later still came the word that the company had finally agreed upon, and that in a short time the properties which were in the suit would be taken into a proposed consolidation. The entire holdings of McGregor and his associates and the holdings of the Keith, Kearns, Belmont, Odine, Crescent, Alliance, and several smaller properties were absorbed, and in June of this year the deal was closed and the papers filed for the incorporation of the new company. The company was formed with the old company officers at the helm, and while it is given out that there were other interests in the property, the old management held at the beginning and now holds all the responsibility for the operation of the new company. At the present time the company is paying dividends on the capitalization of 12 per cent per annum, and have greater ore bodies now developed than in any period in the history of either the Silver King or any of the mines absorbed by the coalition.

Affairs at the Daly-West.

At the Daly West things have moved along at about the same rate as in former years. The management has been handicapped by the cave-in in the drain tunnel, which has rendered impossible all attempts to work the great deposits of ore below the 1,500-foot level on account of the great quantity of water encountered below that point. The company has had labor troubles, but in the end won out, and today it is moving along in the easiest possible way and is producing as much ore as formerly. The recent cut in the dividend is brought about through the intention of the company to lay away a surplus for the purpose of sinking the shaft, as it is now expected that this work will be taken up again shortly, and the expense will be heavy. At the Ontario and Daly, both properties of the same management, things are moving along in as good a manner as could be expected in the circumstances. The force at the Ontario has been reduced to a minimum as a result of the work in the tunnel, and very little, if any, production is going on at all. The Daly has been in the hands of lessees, and no great amount of ore has been sold.

Daly-Judge Looks Well.

The Daly Judge is doing many things

with a view to again resuming the payment of dividends, which were discontinued about the first of the present year. The mine, according to those in authority, is looking finer and under the management of Superintendent Burrell great bodies of ore have been developed. At the present time the company is working at the installation of the electric motor for transportation of ores to the mill of the company. It was found necessary to take up considerable of the bottom in the tunnel in order that the motor might be installed and this necessitated almost a re-mining of the entire tunnel. It is now expected that on January 1 the Daly-Judge for a first trip and from that time on the ore will be made by the water from the tunnel, and the same machinery will serve to run both motors and mill.

Will Try for Zinc Values.

The shipments of the property during the year have been as great as during 1906, when the dividends were paid, but owing to decreased prices in metals and the improvements above mentioned there have been no payments. Zinc in the ores has been a detriment to the Daly-Judge for a score of years and several times promises and threats have been made to establish a plant to work the ore. However, attempts have failed at different times to produce the desired quality of concentrates after treatment, and as a result there have been no definite attempts to handle the zinc product. On October 1 the Grassell Chemical company, a St. Louis concern, after thorough tests of the ores of the Daly-Judge and other zinc producers of the town, determined to establish a plant in Park City, and accordingly went about the construction of the buildings, etc. At this writing a good-sized building is completed, and as soon as the specially designed machinery can be got on the ground and set, the work of handling the dump of the Daly-Judge will be begun. It is stated by the Daly-Judge management that the ore will run about 20 per cent zinc, and with the values now being had for the metal it is certain that the zinc plant can be run at a profit. Another advantage which the new plant will have over all other attempts at handling the ore will be that the new process handles the ores by dry process and heat. This is, according to experts in the line, the successful way of treating the Park City ores as they carry such an amount of iron that other processes fail. The new plant will be in operation about the first of February. Of the American Flag little can be said except that they have shipped over 14,000,000 pounds of ore during the past year, and all carries good values.

The property is being worked in a quiet manner and nothing is given out for publication. The fact, though, that they continue to ship and that a full force of men are steadily employed is an evidence that the mine is a paying proposition.

Jesse Knight Makes His Debut.

Early in the past summer it was rumored that Jesse Knight was beginning to interest himself in Park City properties, and that he had his eye on Utah Treasure Hill. This property had made a sparkling showing for a short time, and then through bad management and other drawbacks the property retired into the background, and it was through that the end was come. The fact, too, that a fortune had been spent by the Woodside people in trying to find the lost vein of the property added considerable force to the statement that the Treasure Hill was a "dead one." However, after considerable dickering the Creole and Kentucky groups of claims were placed in one consolidated end, with 1,000,000 shares, began operations. The development work is being done in the Creole shaft, and according to the statements given out by the management, there is one to begin with. Jesse Knight and his magic name have added a lot to the prospecting interests on the town side of the hill, and it is fully anticipated that in a short time the Treasure Hill Coalition will be a big mine.

Watch Some of the Prospects.

The prospects of town which are being watched with interest are the First National, the Mountain City, the Copper Apex, Iowa Copper, Clark Virginia and the Wild Flower. The First National is located below town on what is known as Graveyard hill. They have sunk a shaft over 200 feet, and are now drifting toward town and toward the Thayne's Canyon district. In the latter drift a stringer of value-bearing rock has been encountered. The Mountain City, Copper Apex and Iowa Copper are all fine properties from a show-ing standpoint, with the last-named two having a little better showing than the other. However, the Mountain City is being managed by M. J. Daly, and with a good bunch of stockholders, it is fully expected that in a short time after work begins in the spring the Iron canyon property will be among the big ones of town.

Taste of Labor Troubles.

During the past year Park City experienced its first taste of labor troubles, and during the entire year, or until the settlement of the Daly-West strike, there existed an unsettled condition of affairs as a result of threatened strikes and lockouts, brought about by agitation and a desire to have the union recognized. However, in the

strike mentioned the miners of town gained a world of experience and, incidentally, a cut in wages, and are now at work thoroughly satisfied with conditions, which, to say the least, have always been far ahead of anything in Utah, or in the United States. The above statement may be, on its face, a broad one, but it is borne out by the fact that most of the men who work in Park City and try other states and camps invariably wander back to the old town.

Will Advertise Park City.

The condition of town is as good as any time in the past, and for the first time since the city was incorporated a party has been organized to advertise Park City, and doing all possible for the up-building and betterment of the town. The club has a membership of over 200, and includes in its membership all the

E. P. JENNINGS.

Mining Engineer.

In a state and country where there are perhaps more expert mining engineers than in any other part of the United States or of all America, a man who can rise above the rank and file of his profession and become recognized as one of the really big men of the line is about as surely made as men get nowadays.

There is no other place in the world where a man has to stand on merit alone as he does in the western mining world, particularly if that man professes to be a mining engineer. Western miners and the stockholders of the big operating companies are generally pretty skeptical as to a man's ability to "see under ground" very far until he shows what he is made of a few times and in an unmistakable manner.

The west and particularly the interior mountain country craving about Salt Lake is full of mining men who are examples of what mining schools do and do not do for the aspiring mining engineer. There are scores of engineers throughout the country who today show what the school of practical experience does for the would-be mining engineer. Of such a school and such a man is E. P. Jennings, 101 Mercantile building, Salt Lake City, Utah. There is no better mining engineer in the western country than Mr. Jennings. He is recognized as one of the most practical, one of the surest and safest experts that ever went down a shaft. He has made a reputation for himself of which any man might well be proud, so extensive is its scope and reach.

From Newfoundland to the Pacific coast and from Alaska to Mexico, Mr. Jennings has put foot in practically every great mining property that in the

leading men of town, and all the mining men interested in the town. Already the club has done considerable, and a well organized effort is being made to advertise the place and to advance the business and private interests of the town.

During the past year, while there has been but little going on in a building line, several new businesses have been opened in Park City. Nowhere in Utah is there a better school system than in Park City, and a high school giving a full four-year course has been conducted here for the last eight years. Thirty-five teachers are employed to instruct the 1,200 school children, and the work is done in four finely equipped buildings, three of which will compare favorably with any such structures in the state.

Park City Health Is Good.

From a health standpoint, Park City

compares favorably with any town of its size in America and, according to the reports furnished by the health department, there are fewer contagious diseases and fewer deaths proportionately than in any town in the state.

On the whole, Park City is in good condition financially, and while business has not been as good as in some of the past years, it must be remembered that the town has had some days of extraordinary prosperity. There are mines to be found in Park City, and while the place is now only associated with the Silver King, Ontario, Daly-West, Daly-Judge and a few of the dividend-payers, the time is not far distant when there will be a new line of payers added to the already big bunch of money-makers, and it might be said here that the old ones are good for years, and accordingly Park City has yet to see her brightest days.

and to the eastern shores of America to pass judgment upon mining properties. He is recognized as one of the leading mining experts, mineralogists and geology experts Utah can boast. His experience extends over thirty-five years of work, and during that time he has examined and passed upon some of the most famous properties ever discovered in America. Upon his judgment millions of dollars have been put into the ground by men who trusted his work to the limit.

ONE ON THE PROFESSOR.

(Boston Herald.)

The scholarly William E. Byerly, professor of mathematics at Harvard, was once asked by a student how to develop a retentive memory. The professor answered that ordinary mental exercise was sufficient to secure a good memory, whereas the student asked if he might test the mental capacity of his instructor. Professor Byerly agreed, and the student asked him to listen to and remember several varied items for a test. He began:

"One quart of whiskey."
"Um," said the professor.
"Six pounds of sugar, a pint of sour milk, three onions, half a gallon of molasses and two raw eggs."
"Um," said the professor.
"One quart of whiskey."
"Um," said the professor.
"Two green apples, twenty-six peanuts, one and one-half cucumbers and four mince pies."
"Um," said the professor.
"A package of starch, sixty-seven cakes of yeast and the skins of seven bananas. Got that down?"
"Yes," answered Dr. Byerly.
"How does it taste?" asked the student.